AMENDMENT UNDER 37 C.F.R. § 1.116

Application No.: 10/576,755

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

Attorney Docket No.: Q94473

application:

**LISTING OF CLAIMS:** 

1. (currently amended) A perpendicular magnetic recording disk for use in perpendicular

magnetic recording, said perpendicular magnetic recording disk characterized by comprising a

substrate, a soft magnetic layer of a material selected from a group consisting of an Fe-based

material and a Co-based material on said substrate, a ferromagnetic layer on said soft magnetic

layer, having a granular structure, and comprising crystal gains mainly made of cobalt (Co) and

grain boundary portions mainly made of a material selected from a group consisting of an oxide,

silicon (Si), or and an oxide of silicon (Si), and a stacked layer layer, on said ferromagnetic layer,

comprising a material selected from a group consisting of CoCrPt, CoPt, CoPd, FePt, CoPt<sub>3</sub>, and

CoPd<sub>3</sub> and having a first layer comprising cobalt (Co) or a Co alloy and a second layer

comprising palladium (Pd) or platinum (Pt), the content of the silicon (Si) in said ferromagnetic

layer being 6at% or more.

2. - 3. (canceled).

4. (previously presented) A perpendicular magnetic recording disk according to claim 1,

characterized in that the content of the silicon (Si) in said ferromagnetic layer is 8at% to 15at%.

5. (currently amended) A perpendicular magnetic recording disk according to claim 1,

characterized in that a spacer layer is provided between said ferromagnetic layer and said stacked

layer comprising a material selected from a group consisting of CoCrPt, CoPt, CoPd, FePt,

CoPt<sub>3</sub>, and CoPd<sub>3</sub>.

6. (currently amended) A method of manufacturing a perpendicular magnetic recording

disk for use in perpendicular magnetic recording and having at least a soft magnetic layer of a

material selected from a group consisting of an Fe-based material and a Co-based material on a

substrate and a magnetic recording layer on said soft magnetic layer, said method characterized

by,

in a step of forming said magnetic recording layer comprising, on said soft magnetic

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layer, a ferromagnetic layer of a granular structure comprising silicon (Si) or an oxide of silicon (Si) between crystal grains comprising cobalt (Co), the content of the silicon (Si) in said ferromagnetic layer being 6at% or more, and a stacked layer, on said ferromagnetic layer, comprising a material selected from a group consisting of CoCrPt, CoPt, CoPt, CoPd, FePt, CoPt<sub>3</sub>, and CoPd<sub>3</sub> having a first layer comprising Co or a Co alloy and a second layer comprising palladium (Pd) or platinum (Pt), forming said ferromagnetic layer on said soft magnetic layer by sputtering in an argon gas atmosphere and then forming said stacked layer comprising the material selected from the group consisting of CoCrPt, CoPt, CoPt, CoPd, FePt, CoPt<sub>3</sub>, and CoPd<sub>3</sub> by sputtering in an argon gas atmosphere at a gas pressure lower than a gas pressure used when forming said ferromagnetic layer.

## 7. - 8. (canceled)

9. (currently amended) A perpendicular magnetic recording disk according to claim 3 4, characterized in that a spacer layer is provided between said ferromagnetic layer and said stacked layer comprising a material selected from a group consisting of CoCrPt, CoPt, CoPd, FePt, CoPt<sub>3</sub>, and CoPd<sub>3</sub>.

10. (new) A perpendicular magnetic recording disk according to claim 5, characterized in that said spacer layer is selected from a group consisting of a Pd layer and a Pt layer.